

What is claimed is:

1. A method of manufacturing a semiconductor device, comprising the following steps of:

forming a gate electrode on a silicon substrate;

forming first spacers on side surfaces of the gate electrode respectively;

chipping off the surface of the silicon substrate with the gate electrode and the first spacers as masks to thereby form steplike portions at positions adjacent to base portions of the first spacers;

forming second spacers at the steplike portions respectively; and

forming silicides on the silicon substrate with the first spacers and the second spacers as masks.

2. The method according to claim 1, wherein the steplike portions are respectively formed so as to have upward slanting surfaces.

3. The method according to claim 1, wherein the steplike portions are respectively formed so as to have surfaces vertical to the surface of the silicon substrate.

4. The method according to claim 1, wherein the steplike portions are respectively formed so as to have curved surfaces convex to the gate electrode.

5. The method according to claim 1, wherein the steplike portions are respectively formed so as to have downward slanting surfaces.

6. The method according to claim 1, wherein the formation of the silicides is done by depositing a metal on the surface of the silicon substrate by sputtering and effecting heat treatment thereon.

7. The method according to claim 6, wherein the metal is cobalt.

8. The method according to claim 1, wherein the gate electrode is formed of a polysilicon layer located on a gate oxide film, a tungsten layer located on the polysilicon layer and a silicon nitride film located on the tungsten layer.

9. The method according to claim 1, wherein a sidewall oxide film is formed on each side surface of the gate electrode and said each first spacer is formed thereon.

10. The method according to claim 1, wherein the second spacers are formed of an oxide film.

11. The method according to claim 10, wherein the formation of the second spacers is done by forming an oxide film for covering the surface of the silicon substrate, thereafter covering portions other than a device region, of the substrate surface with a resist pattern and anisotropically etching the oxide film in this condition.